

Year 4 Fractions: A Step-by-Step Guide for Parents

This step-by-step explanation to learning fractions will help you support your child's learning at home. Each subject is broken down into manageable chunks, providing you with a simple guide to follow when exploring whether your child is just learning to recognise different fractions or already understands how different fractions can be equivalent (the same value) as each other, there'll be a suitable step for your child.

Within **this area of the website**, you will find a selection of resources intended to help your child learn about each step of this guide. Each step also contains a keyword or phrase that you can use to search the Twinkl site for more resources and activities, designed to support your child in achieving that stage. Simply type the keyword or phrase into the search bar and press enter to explore together.

We hope you find the information on our website and resources useful. The contents of this resource are for general, informational purposes only. This guide is intended to offer parents general guidance on what subject areas tend to be covered in their child's year group and where they could support their children at home. However, please be aware that every child is different and information can quickly become out of date. There are some subject areas that we have intentionally not covered due to the nature of how they are taught or because a trained professional needs to teach these areas. We try to ensure that the information in our resources is correct but every school teaches the national curriculum in its own way. If you would like further guidance or are unsure in any way, we recommend that you speak to your child's teacher or another suitably qualified professional.

Fractions

What Does the Maths National Curriculum Say about Fractions in Year 4?

In year 4, children continue to add and subtract fractions and need to become more experienced at working out how fractions with different denominators (bottom numbers) are equivalent (equal in value) to each other. Children also need to become confident with fractions of measurement and money. At this stage, most children will be introduced to decimals and will begin to build a connection between tenths, hundredths and thousandths and how these are written as both fractions and decimals.

How Do You Convert between Fractions and Decimals?

Decimal to Fraction: Use decimal place value to write the equivalent fraction and simplify if needed. For example, $0.125 = \frac{125}{1000} = \frac{1}{8}$

Fraction to Decimal: Divide the numerator by the denominator. For example, $\frac{1}{10} = 1 \div 10 = 0.1$

If you're in doubt, don't worry, just follow the steps in the activities and check the answer sheets. This way, you'll spot the patterns and learn alongside your child.

How Do You Compare and Order Fractions?

To work out whether a fraction is greater, you need to figure out the common denominator between the two. You can then compare both of the fractions directly and put them in order using the numerators only.

How Do You Compare and Order Decimals?

Some pupils find ordering decimals tricky as they assume that 0.508 must be bigger than 0.58 as 0.508 has more digits. However this isn't the case. To compare decimals start by setting up a table with the decimal point in the same place for each number. Fill in any blank spaces with a 0. Starting from the left and working right, compare digits until one number wins. In this case $8 > 0$ and therefore $0.58 > 0.508$. Remember $>$ means 'is greater than'. If you find this area tricky to explain, then consider using our Compare Decimals PowerPoint to support your own learning and to help you explain to your child.

What Is an Equivalent Fraction?

Equivalent fractions are fractions that are worth the same amount. For example, two quarters is the same as a half. $\frac{2}{4} = \frac{1}{2}$. In year 4, children only need to deal with simple equivalent fractions but the more opportunities they have to practise, the better.

Fractions Picnic

Why not hold a fractions picnic where you have to divide up each foodstuff into the right number of parts and know the fraction you've been given to eat it? If it's not good weather for a picnic, then cut up pictures from magazines of foodstuffs (pizzas, apples, etc.) and see if you can make equivalent fractions (e.g. two quarters of an apple equals one half).

Fractions Picture Game

Make simple pictures on A4 paper and cut a piece of A4 paper into four pieces. When it's the next player's turn, that player can choose which bit of the picture to reveal. If someone guesses when $\frac{3}{4}$ of the cards are still on the picture, they get 3 points, when $\frac{2}{4}$ are still covered they get two points and when $\frac{1}{4}$ is covered they get just one point. Just say what you see!

Recipe Fractions

Try finding an easy recipe, such as one for biscuits or fairy cakes. Make the recipe for half the number of biscuits/cakes. Get your child to halve all the quantities in the recipe and check it before they start.

Step 1

Equivalent Fractions

Equivalent fractions are fractions that, although the numerator and denominator are different, they are in the same ratio to each other and so the fractions are worth the same. So $\frac{2}{4}$ is the same as $\frac{1}{2}$, $\frac{5}{10}$ or $\frac{4}{8}$. All of these fractions are worth a half because the numerator is half the denominator. If you think you'll find explaining this tricky, then work through this **Year 4 Equivalent Fractions PowerPoint** to support you and your child before taking a look at these colourful cards. You don't need to print them, you can view them on a tablet or computer screen. The cards cover all the expectations and examples that are commonly taught in year 4 equivalent fractions.



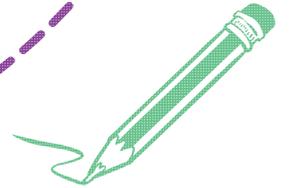
Adding and Subtracting Fractions

By the time your child is in year 4, they will understand that $\frac{1}{2} + \frac{1}{2}$ make a whole one. There are also other ways to make a whole one, for example $\frac{1}{2} + \frac{1}{4} + \frac{1}{4}$. Show your child this, by breaking a circle into halves and quarters and seeing how many ways your child can make a whole one. When we add fractions, if the denominators are the same, we can just add the numerators. So:

$$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{3}{4}$$

Your child should be able to show this with the shapes you have used. When we write it down, we can see that we only add the numerators because 'one quarter' add 'one quarter' add 'one quarter' must make 'three quarters'. It even makes sense when we say it in words!

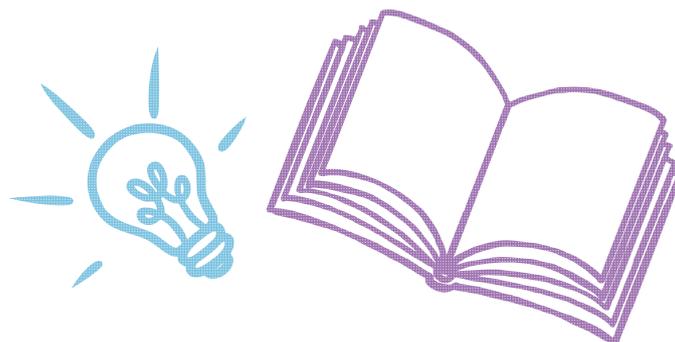
Step 2



Step 3

Fractions and Money Problems

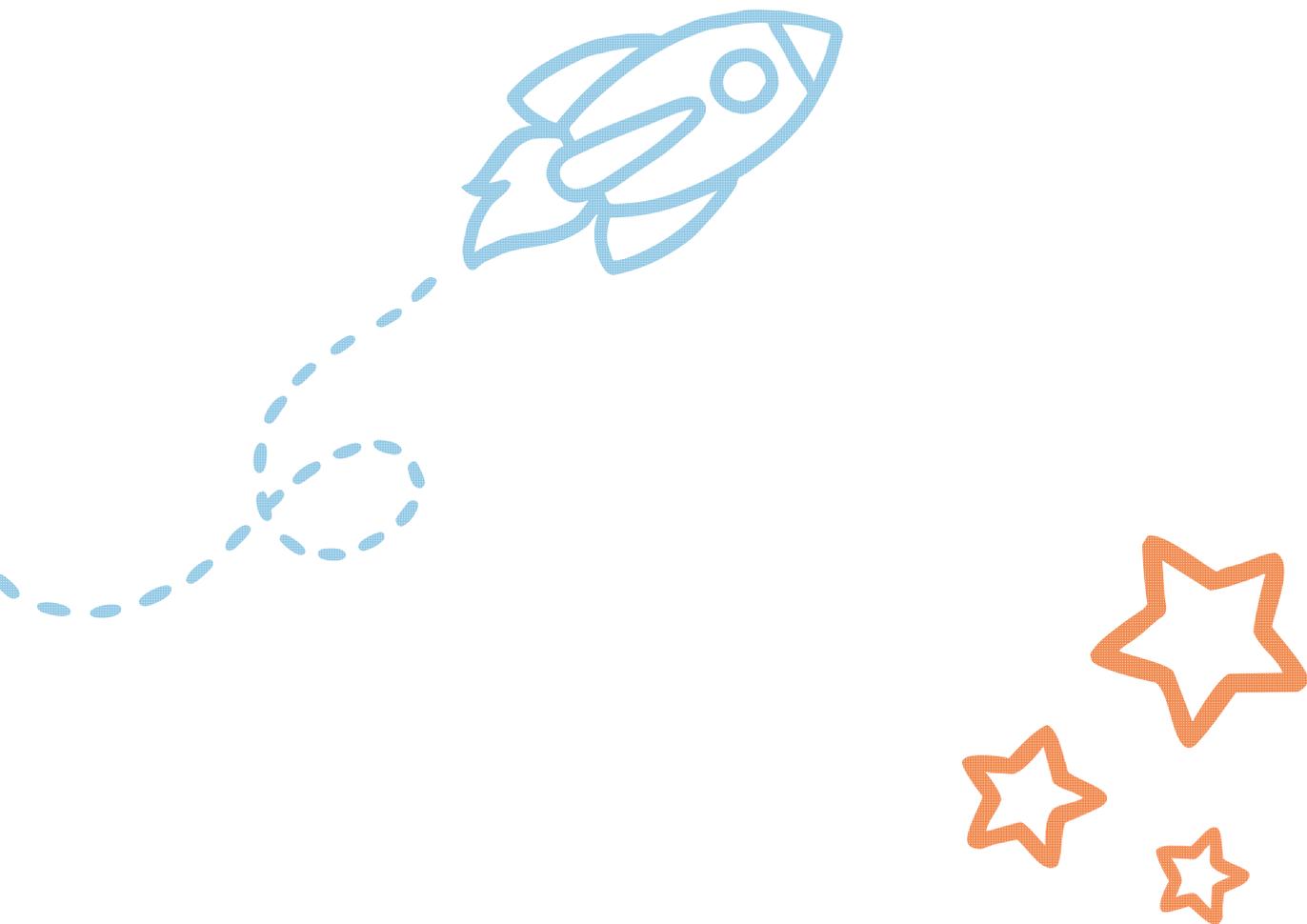
By year 4, your child needs to be able to calculate fractions of numbers with units, such as volumes, weights, length and money. This worksheet is a great overview that encourages your child to calculate the fractions of different things. Remember that the focus is on your child's maths, so be helpful and read through the problems with your child and, if necessary, talk through the problems before they have a go.



Step 4

Decimals and Fractions

Decimals are often introduced at the year 4 stage. Children, by this age, are used to place value (the difference between hundreds, tens and units) and have been learning fractions for a while. This is a great pack to support your child in their understanding of tenths and hundredths, which is the basis of understanding decimals. Within the pack is an 'Adult Support Booklet', with a clear explanation of what is expected of children at year 4 and some practice questions so you can give it a go yourself before supporting your child.



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Boost

Twinkl Boost is a range of intervention resources, created to support and lift learning with children at every level. These include our easy-to-use SATs and Phonics Screening resources.



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Imagine resources are designed to help your children to think creatively, question and imagine. Every week, a new topic consisting of five photos, each with related activities, is created.



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Twinkl Originals are engaging stories written to inspire children from EYFS to KS2. Designed to encourage a love of reading and help curriculum-wide learning through accompanying resources.



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Twinkl Kids' TV is our wonderful YouTube channel dedicated to fun and informative video-style resources full of new and creative activities you can try at home!